

SEQUENCE LISTING

<110> Kroczek, Richard

<120> Anti-human T-cell costimulating monoclonal antibodies

<130> 7853-215-999

<140> 09/509,283

<141> 2000-08-11

<160> 5

<170> PatentIn version 3.0

<210> 1

<211> 2641

<212> DNA

<213> 8F4

<220>

<221> CDS

<222> 68..667

<400> 1

```

cgagagcctg aattcactgt cagctttgaa cactgaacgc gaggactgtt aactgtttct      60
ggcaaac atg aag tca ggc ctc tgg tat ttc ttt ctc ttc tgc ttg cgc      109
      Met Lys Ser Gly Leu Trp Tyr Phe Phe Leu Phe Cys Leu Arg
      1          5          10
att aaa gtt tta aca gga gaa atc aat ggt tct gcc aat tat gag atg      157
Ile Lys Val Leu Thr Gly Glu Ile Asn Gly Ser Ala Asn Tyr Glu Met
15          20          25          30
ttt ata ttt cac aac gga ggt gta caa att tta tgc aaa tat cct gac      205
Phe Ile Phe His Asn Gly Gly Val Gln Ile Leu Cys Lys Tyr Pro Asp
      35          40          45
att gtc cag caa ttt aaa atg cag ttg ctg aaa ggg ggg caa ata ctc      253
Ile Val Gln Gln Phe Lys Met Gln Leu Leu Lys Gly Gly Gln Ile Leu
      50          55          60
tgc gat ctc act aag aca aaa gga agt gga aac aca gtg tcc att aag      301
Cys Asp Leu Thr Lys Thr Lys Gly Ser Gly Asn Thr Val Ser Ile Lys
      65          70          75
agt ctg aaa ttc tgc cat tct cag tta tcc aac aac agt gtc tct ttt      349
Ser Leu Lys Phe Cys His Ser Gln Leu Ser Asn Asn Ser Val Ser Phe
      80          85          90
ttt cta tac aac ttg gac cat tct cat gcc aac tat tac ttc tgc aac      397
Phe Leu Tyr Asn Leu Asp His Ser His Ala Asn Tyr Tyr Phe Cys Asn
95          100          105          110
cta tca att ttt gat cct cct cct ttt aaa gta act ctt aca gga gga      445
Leu Ser Ile Phe Asp Pro Pro Pro Phe Lys Val Thr Leu Thr Gly Gly
      115          120          125
tat ttg cat att tat gaa tca caa ctt tgt tgc cag ctg aag ttc tgg      493
Tyr Leu His Ile Tyr Glu Ser Gln Leu Cys Cys Gln Leu Lys Phe Trp
      130          135          140
tta ccc ata gga tgt gca gcc ttt gtt gta gtc tgc att ttg gga tgc      541
Leu Pro Ile Gly Cys Ala Ala Phe Val Val Val Cys Ile Leu Gly Cys
      145          150          155
ata ctt att tgt tgg ctt aca aaa aag aag tat tca tcc agt gtg cac      589
Ile Leu Ile Cys Trp Leu Thr Lys Lys Lys Tyr Ser Ser Ser Val His
      160          165          170
gac cct aac ggt gaa tac atg ttc atg aga gca gtg aac aca gcc aaa      637
Asp Pro Asn Gly Glu Tyr Met Phe Met Arg Ala Val Asn Thr Ala Lys
175          180          185          190

```

aaa tct aga ctc aca gat gtg acc cta taa tatggaactc tggcaccag 687
Lys Ser Arg Leu Thr Asp Val Thr Leu

195
gcatgaagca cggtggccag ttttctctcaa cttgaagtgc aagattctct tatttccggg 747
accacggaga gtctgactta actacataca tcttctgctg gtgttttggt caatctggaa 807
gaatgactgt atcagtcagt ggggatttta acagactgcc ttggtactgc cgagtcctct 867
caaaacaaac accctcttgc aaccagcttt ggagaaagcc cagctcctgt gtgctcactg 927
ggagtggaa cctgtctctc acatctgctc cttagcagtc atcagccagt aaaacaaaca 987
catttacaag aaaaatgttt taaagatgcc aggggtactg aatctgcaaa gcaaatgagc 1047
agccaaggac cagcatctgt ccgcatttca ctatcatact acctcttctt tctgtaggga 1107
tgagaattcc tcttttaatc agtcaaggga gatgcttcaa agctggagct attttatttc 1167
tgagatgttg atgtgaactg tacattagta catactcagt actctccttc aattgctgaa 1227
ccccagttga ccattttacc aagacttttag atgctttctt gtgccctcaa ttttcttttt 1287
aaaaatactt ctacatgact gcttgacagc ccaacagcca ctctcaatag agagctatgt 1347
cttacattct ttcctctgct gctcaatagt tttatatatc tatgcataca tatatacaca 1407
catatgtata taaaattcat aatgaatata tttgcctata ttctccctac aagaatattt 1467
ttgctccaga aagacatgtt cttttctcaa attcagttaa aatgggtttac tttgttcaag 1527
ttagtggtag gaaacattgc ccggaattga aagcaaattt attttattat cctattttct 1587
accattatct atgttttcat ggtgctatta attacaagtt tagttctttt tgtagatcat 1647
attaaaattg caaacaatat catctttaat gggccagcat tctcatggg tagagcagaa 1707
tattcattta gcctgaaagc tgcagttact atagggtgct gtcagactat acccatggtg 1767
cctctgggct tgacaggtca aaatgggtccc catcagcctg gagcagccct ccagacctgg 1827
gtggaattcc aggggttgaga gactcccctg agccagaggc cactagggtat tcttgctccc 1887
agaggctgaa gtcaccctgg gaatcacagt ggtctacctg cattcataat tccaggatct 1947
gtgaagagca catatgtgtc agggcacaaat tccctctcat aaaaaccaca cagcctggaa 2007
attggccctg gcccttcaa atagccttct ttagaatatg atttggtag aaagattctt 2067
aaatatgtgg aatatgatta ttcttagctg gaatatattt tctacttctt gtctgcatgc 2127
ccaaggcttc tgaagcagcc aatgtcgatg caacaacatt tgtaacttta ggtaaacctgg 2187
gattatgttg tagtttaaca ttttgtaact gtgtgcttat agtttacaag tgagaccgga 2247
tatgtcatta tgcatactta tattatctta agcatgtgta atgctggatg tgtacagtac 2307
agtactgaac ttgtaatttg aatctagtag ggtgttctgt tttcagctga cttggacaac 2367
ctgactggct ttgcacaggt gttccctgag ttgtttgcag gtttctgtgt gtggggggg 2427
gtatggggag gagaaccttc atgggtggccc acctggcctg gttgtccaag ctgtgcctcg 2487
acacatcctc atccccagca tgggacacct caagatgaat aataattcac aaaatttctg 2547
tgaaatcaaa tccagtttta agaggagcca cttatcaaag agattttaac agtagtaaga 2607
aggcaaagaa taaacatttg atattcagca actg 2641

<210> 2
<211> 199
<212> PRT
<213> 8F4

<400> 2
Met Lys Ser Gly Leu Trp Tyr Phe Phe Leu Phe Cys Leu Arg Ile Lys
1 5 10 15
Val Leu Thr Gly Glu Ile Asn Gly Ser Ala Asn Tyr Glu Met Phe Ile
20 25 30
Phe His Asn Gly Gly Val Gln Ile Leu Cys Lys Tyr Pro Asp Ile Val
35 40 45
Gln Gln Phe Lys Met Gln Leu Leu Lys Gly Gly Gln Ile Leu Cys Asp
50 55 60
Leu Thr Lys Thr Lys Gly Ser Gly Asn Thr Val Ser Ile Lys Ser Leu
65 70 75 80
Lys Phe Cys His Ser Gln Leu Ser Asn Asn Ser Val Ser Phe Phe Leu
85 90 95

Tyr Asn Leu Asp His Ser His Ala Asn Tyr Tyr Phe Cys Asn Leu Ser
 100 105 110
 Ile Phe Asp Pro Pro Pro Phe Lys Val Thr Leu Thr Gly Gly Tyr Leu
 115 120 125
 His Ile Tyr Glu Ser Gln Leu Cys Cys Gln Leu Lys Phe Trp Leu Pro
 130 135 140
 Ile Gly Cys Ala Ala Phe Val Val Val Cys Ile Leu Gly Cys Ile Leu
 145 150 155 160
 Ile Cys Trp Leu Thr Lys Lys Lys Tyr Ser Ser Ser Val His Asp Pro
 165 170 175
 Asn Gly Glu Tyr Met Phe Met Arg Ala Val Asn Thr Ala Lys Lys Ser
 180 185 190
 Arg Leu Thr Asp Val Thr Leu
 195

<210> 3
 <211> 17
 <212> DNA
 <213> Artificial

<220>
 <223> Description of Artificial Sequence: Degenerate oligonucleotide

<221> misc_feature
 <222> 3, 9, 15
 <223> n = a, t, g, or c

<400> 3
 mgnctsacng aygtnac

17

<210> 4
 <211> 17
 <212> DNA
 <213> Artificial

<220>
 <223> Description of Artificial Sequence: Degenerate oligonucleotide

<221> misc_feature
 <222> 3, 9, 15
 <223> n = a, t, g, or c

<400> 4
 mgnytdacng aygtnac

17

<210> 5
 <211> 7
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> 1
 <223> Xaa = Unknown amino acid

<400> 5

Xaa Arg Leu Thr Asp Val Thr
1 5